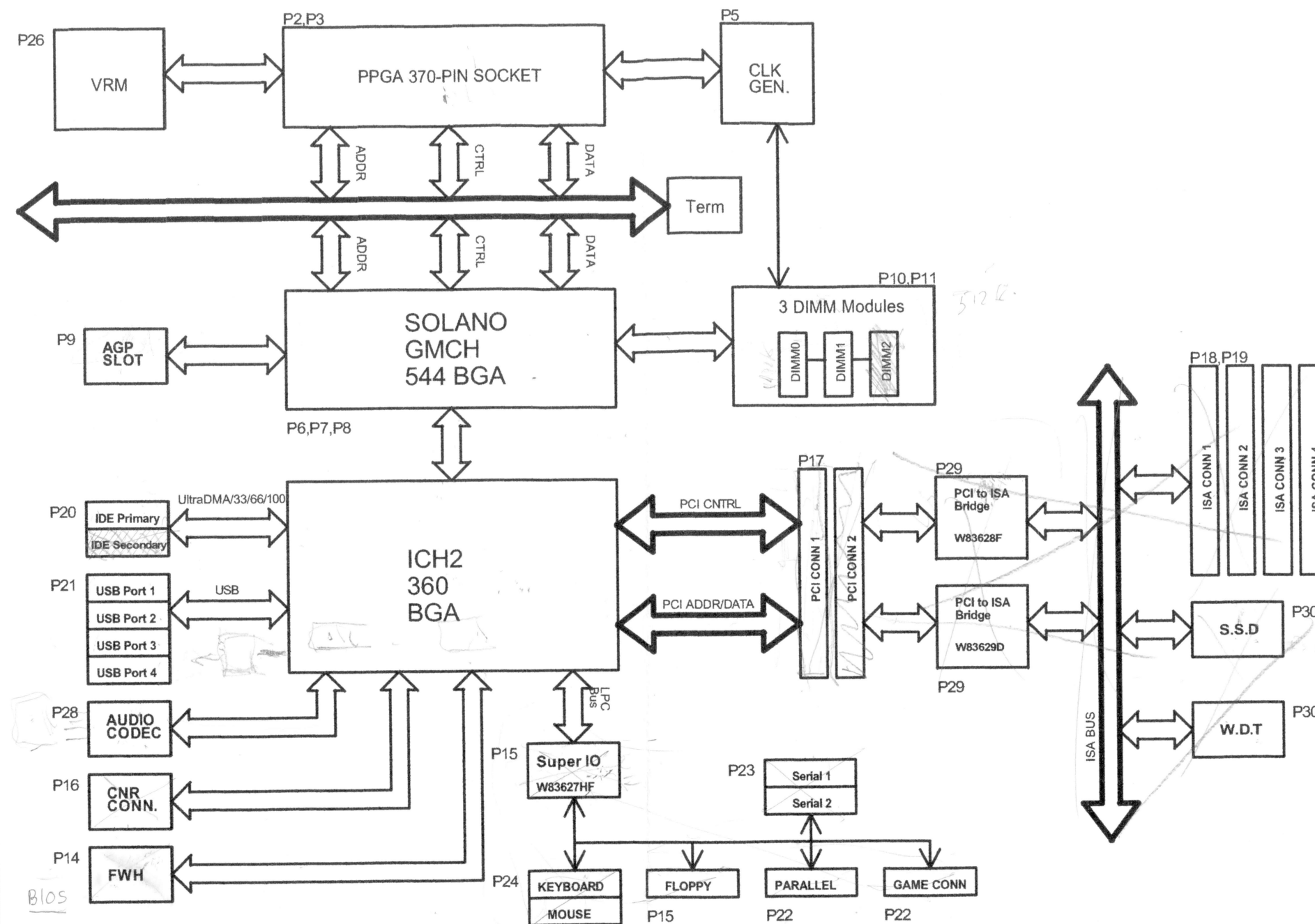


M815A

FILENAME:

- 1-COVER SHEET
- 2-SOCKET370 1/1
- 3-SOCKET370 2/2
- 4-GTL RESISTER
- 5-CLOCK RTM560-25R
- 6-GMCH_82815EP 1/3
- 7-GMCH_82815EP 2/3
- 8-GMCH_82815EP 3/3
- 9-APG SLOT
- 10-DIMM 1,2
- 11-DIMM 3
- 12-ICH2_82801BA 1/2
- 13-ICH2_82801BA 2/2
- 14-FWH
- 15-SIO_W83627HF
- 16-CNR SLOT
- 17-PCI SLOT 1,2
- 18-ISA SLOT 0,1
- 19-ISA SLOT 2,3
- 20-IDE CONNECTOR
- 21-USB PROT
- 22-LPT/GAME PROT
- 23-COM PORT
- 24-KB/MS/FAN CONNECTOR
- 25-SYSTEM CONNECTOR
- 26-VRM_CS51313
- 27-ATX_CONN./REGULATOR
- 28-AC97_AD1881A
- 29-ISA BRIDGE_W83628F
- 30-WDT/DOC



THREE CORE COMPONENTS :

1. Solano : Graphics and Memory Controller Hub. integrate
 - 66/100/133MHz, P6 family system bus controller.
 - 100/133MHz, SDRAM controller, AGP interface.
 - high speed interface for communication with the ICH.
2. ICH2 : I/O Controller Hub. integrate
 - Ultra ATA33/66/100 controller.
 - USB host controller.
 - LPC interface controller.
 - FWH interface controller.
 - PCI interface controller.
 - AC'97 digital controller.
 - Hub interface for communication with the GMCH.
3. FWH : Firmware Hub.

EPoX COMPUTER PRODUCCCE

Intel Corporation

BLOCK DIAGRAM		
Size	Document Number	Rev
C	M815ADS11	1.1
Date:	Sheet	of 30

(4,6) HD-[0..63]

HD-[0..63]

U13
HD-0 W1 D0
HD-1 T4 D1
HD-2 N1 D2
HD-3 M6 D3
HD-4 U1 D4
HD-5 S3 D5
HD-6 T6 D6
HD-7 J1 D7
HD-8 S1 D8
HD-9 P6 D9
HD-10 Q3 D10
HD-11 M4 D11
HD-12 Q1 D12
HD-13 L1 D13
HD-14 N3 D14
HD-15 U3 D15
HD-16 H4 D16
HD-17 R4 D17
HD-18 P4 D18
HD-19 H6 D19
HD-20 L3 D20
HD-21 G1 D21
HD-22 F8 D22
HD-23 G3 D23
HD-24 K6 D24
HD-25 E3 D25
HD-26 F1 D26
HD-27 F12 D27
HD-28 A5 D28
HD-29 A3 D29
HD-30 J3 D30
HD-31 C5 D31
HD-32 F6 D32
HD-33 C1 D33
HD-34 C7 D34
HD-35 B2 D35
HD-36 C9 D36
HD-37 A9 D37
HD-38 D8 D38
HD-39 D10 D39
HD-40 C15 D40
HD-41 D14 D41
HD-42 D12 D42
HD-43 A7 D43
HD-44 A11 D44
HD-45 C11 D45
HD-46 A21 D46
HD-47 A15 D47
HD-48 A17 D48
HD-49 C13 D49
HD-50 C25 D50
HD-51 A13 D51
HD-52 D16 D52
HD-53 A23 D53
HD-54 C21 D54
HD-55 C19 D55
HD-56 C27 D56
HD-57 A19 D57
HD-58 C23 D58
HD-59 C17 D59
HD-60 A25 D60
HD-61 A27 D61
HD-62 E25 D62
HD-63 F16 D63

AGTL+

GTL

USE 0603 PACKAGES AND
DISTRIBUTE WITHIN 500MILS
OF MENDOCINO.
GTLREF INPUTS (1CAP FOR
EVERY 2 INPUTS).

VTT1.5

R275
75.0 1%

R274
150 1%

C188
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C176
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C182
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C204
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AS SUBSTITUTE

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A10 AH6 HA-10
A11 AK10 HA-11
A12 AN5 HA-12
A13 AL7 HA-13
A14 AK14 HA-14
A15 AL5 HA-15
A16 AN7 HA-16
A17 AE1 HA-17
A18 Z6 HA-18
A19 AG3 HA-19
A20 AC3 HA-20
A21 AJ1 HA-21
A22 AE3 HA-22
A23 AB6 HA-23
A24 AB4 HA-24
A25 AF6 HA-25
A26 Y3 HA-26
A27 AA1 HA-27
A28 AK6 HA-28
A29 Z4 HA-29
A30 AA3 HA-30
A31 AD4 HA-31

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BPRI# AN17 BPRI- (6)
BNR# AH14 BNR- (4,6)
LOCK# AK20 HLOCK- (4,6)

ADS# AN31 HADS- (4,6)

REQ#0 AK18 HREQ-0 (4,6)
REQ#1 AH16 HREQ-1 (4,6)
REQ#2 AH18 HREQ-2 (4,6)
REQ#3 AL19 HREQ-3 (4,6)
REQ#4 AL17 HREQ-4 (4,6)

DRDY# AN27 DRDY- (4,6)
DBSY# AL27 DBSY- (4,6)
TRDY# AN25 HTRDY- (6)

HIT# AL25 HIT- (4,6)
HITM# AL23 HITM- (4,6)
DEFER# AN19 DEFER- (6)

BR0# AN29 BR0- (56)
RS#0 AH26 RS-0 (4,6)
RS#1 AH22 RS-1 (4,6)
RS#2 AK28 RS-2 (4,6)

BPM#0 C35 X
BPM#1 G33 X
BP#2 G33 X
BP#3 E37 X

PREQ# J37 ITPREQ-
PRDY# A35 PRDY-

IERR# AE35 X

TCK AL33 R_TCK
TDI AN35 TDI
TDO AN37 TDO
TMS AK32 R_TMS
TRST# AN33 TRST-

THERMTRIP# AH28 TRMTRIP-
VCMOS
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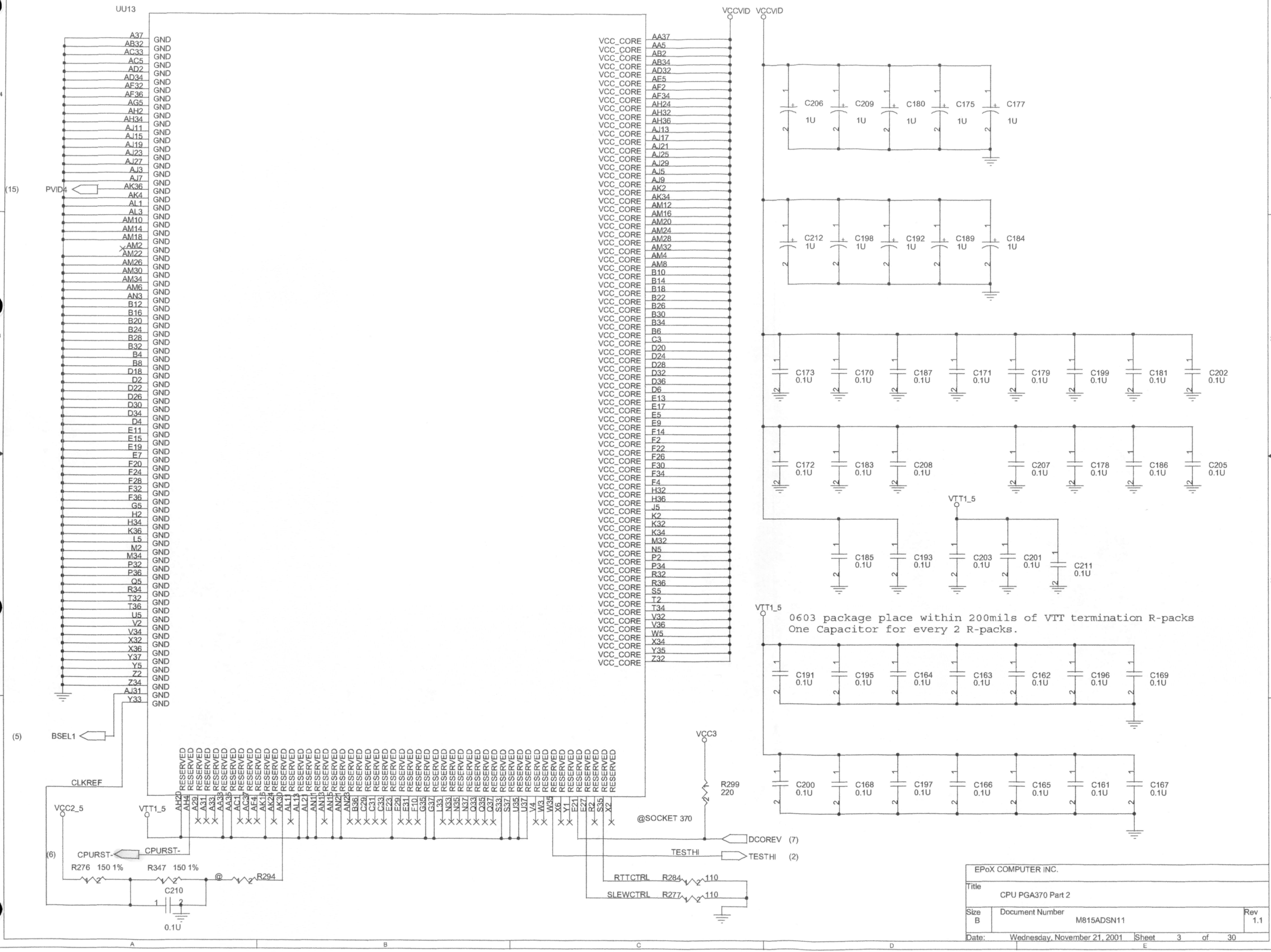
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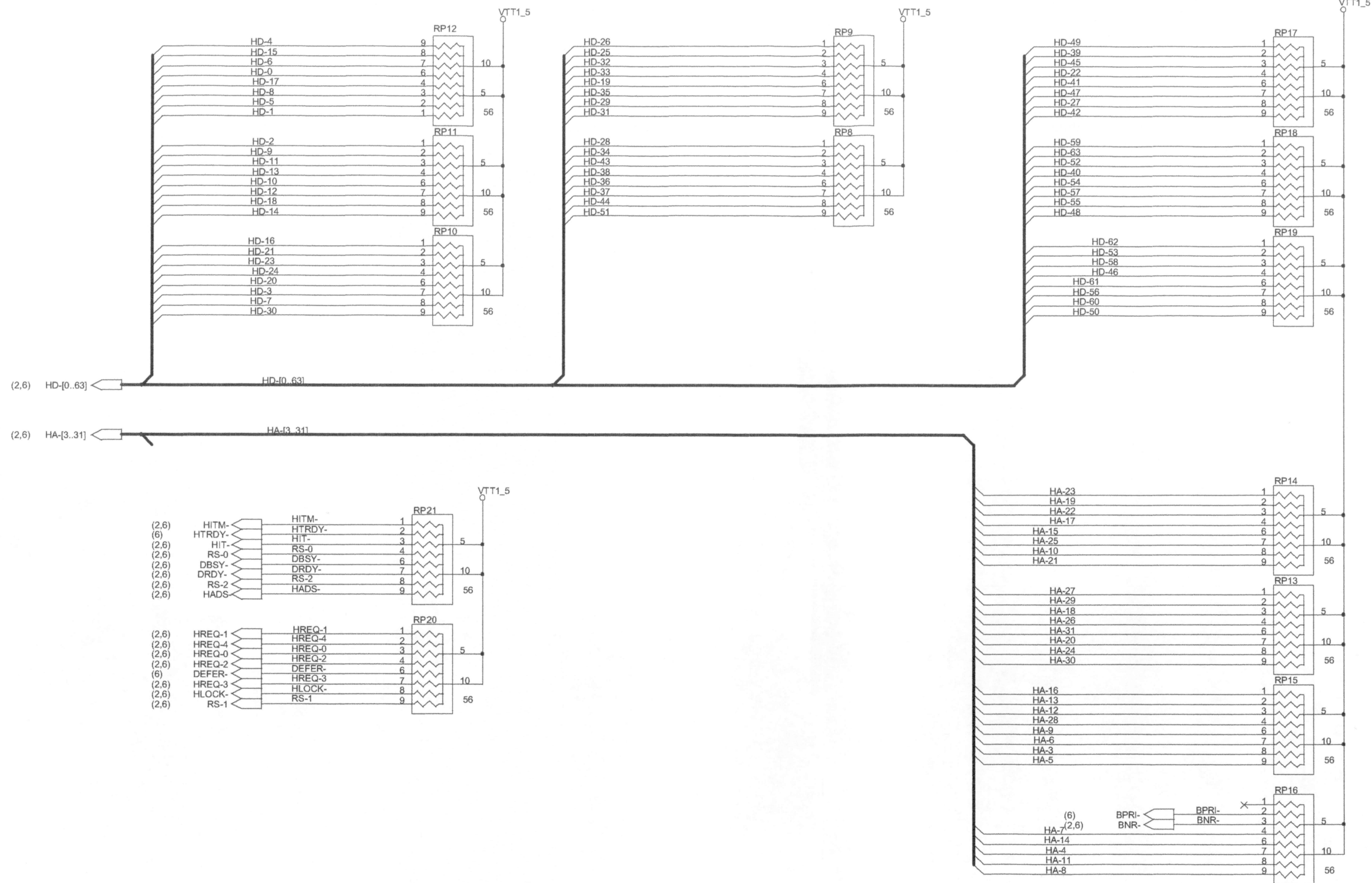
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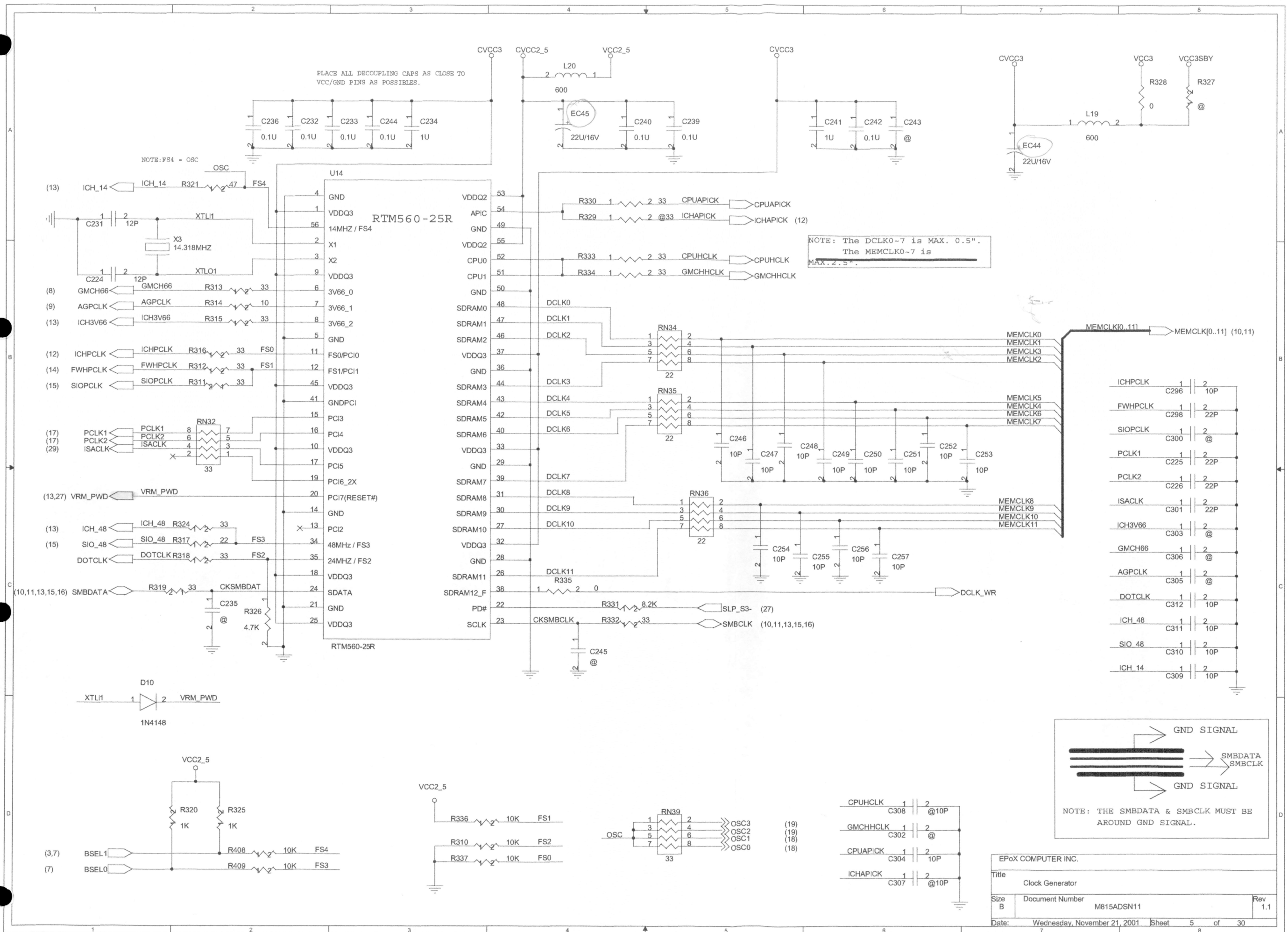
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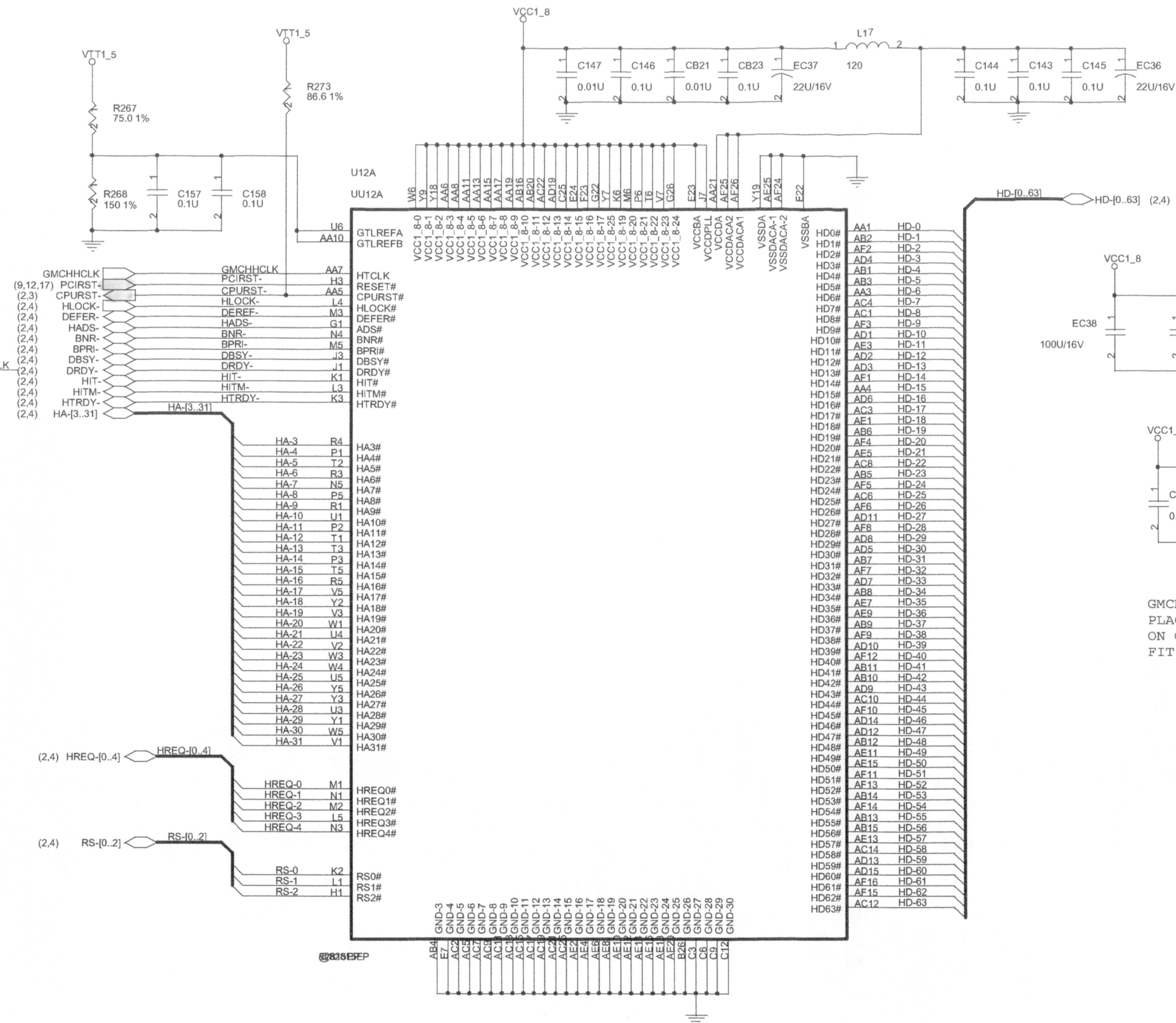
PLACE IN 370 PGA SOCKET CAVITY.



EPoX COMPUTER INC.		
Title CPU PGA370 Part 2		
Size B	Document Number M815ADSN11	Rev 1.1
Date: Wednesday, November 21, 2001	Sheet 3	of 30



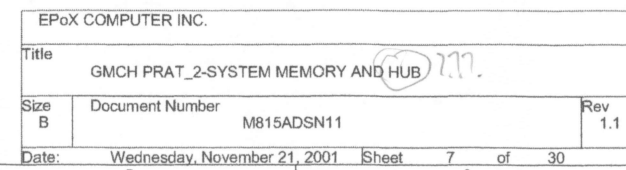


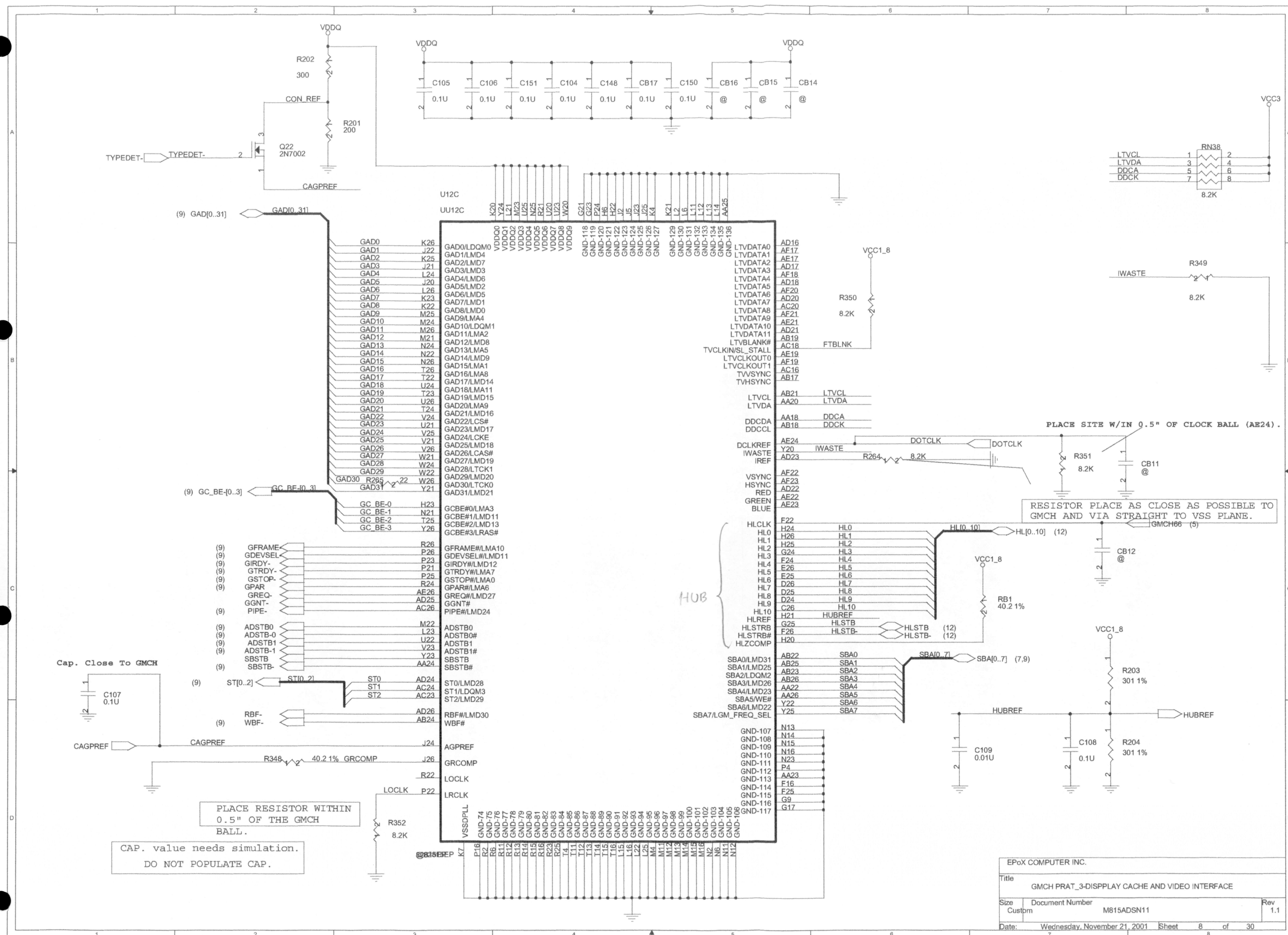


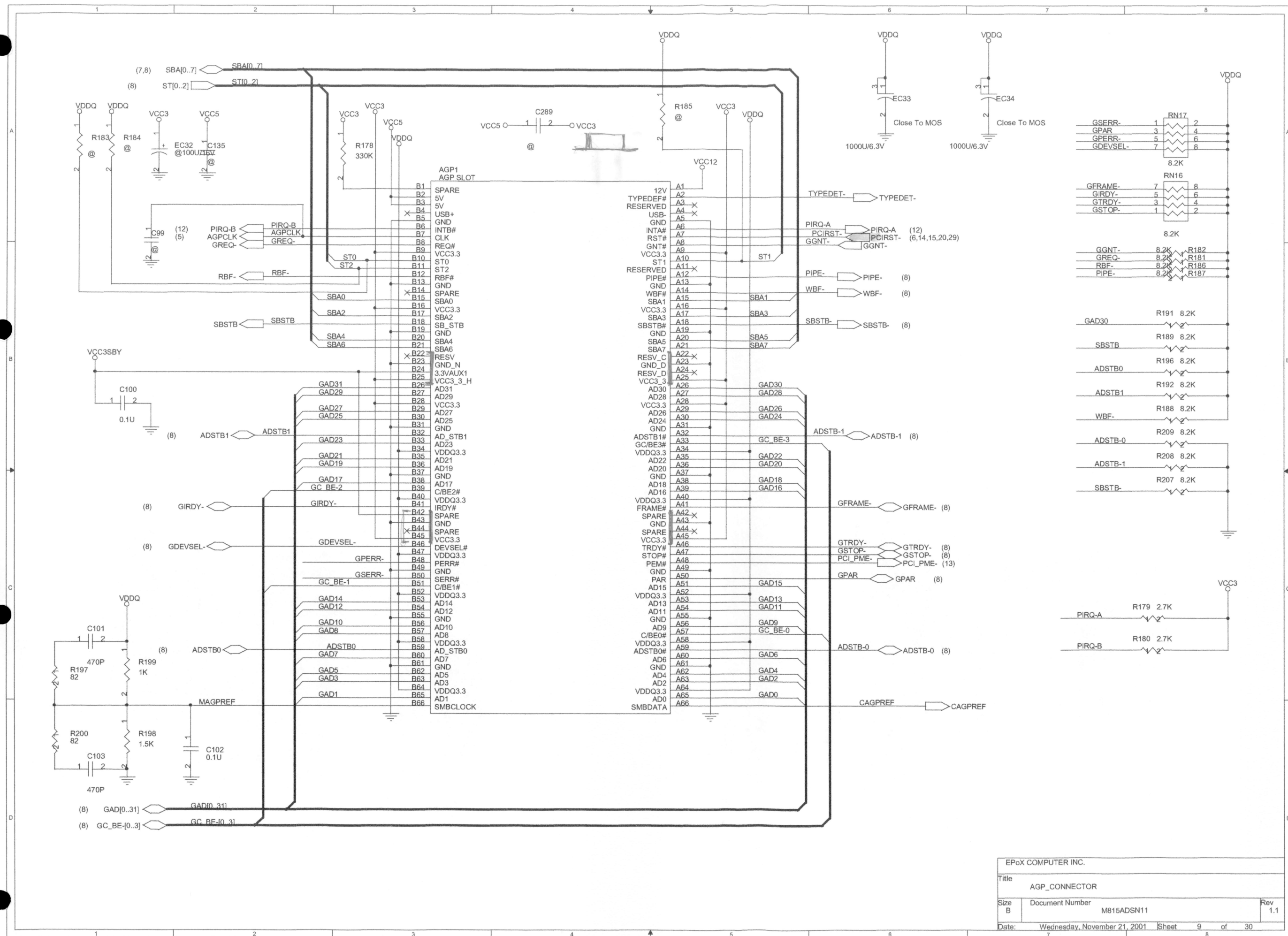
GMCH Decoupling.

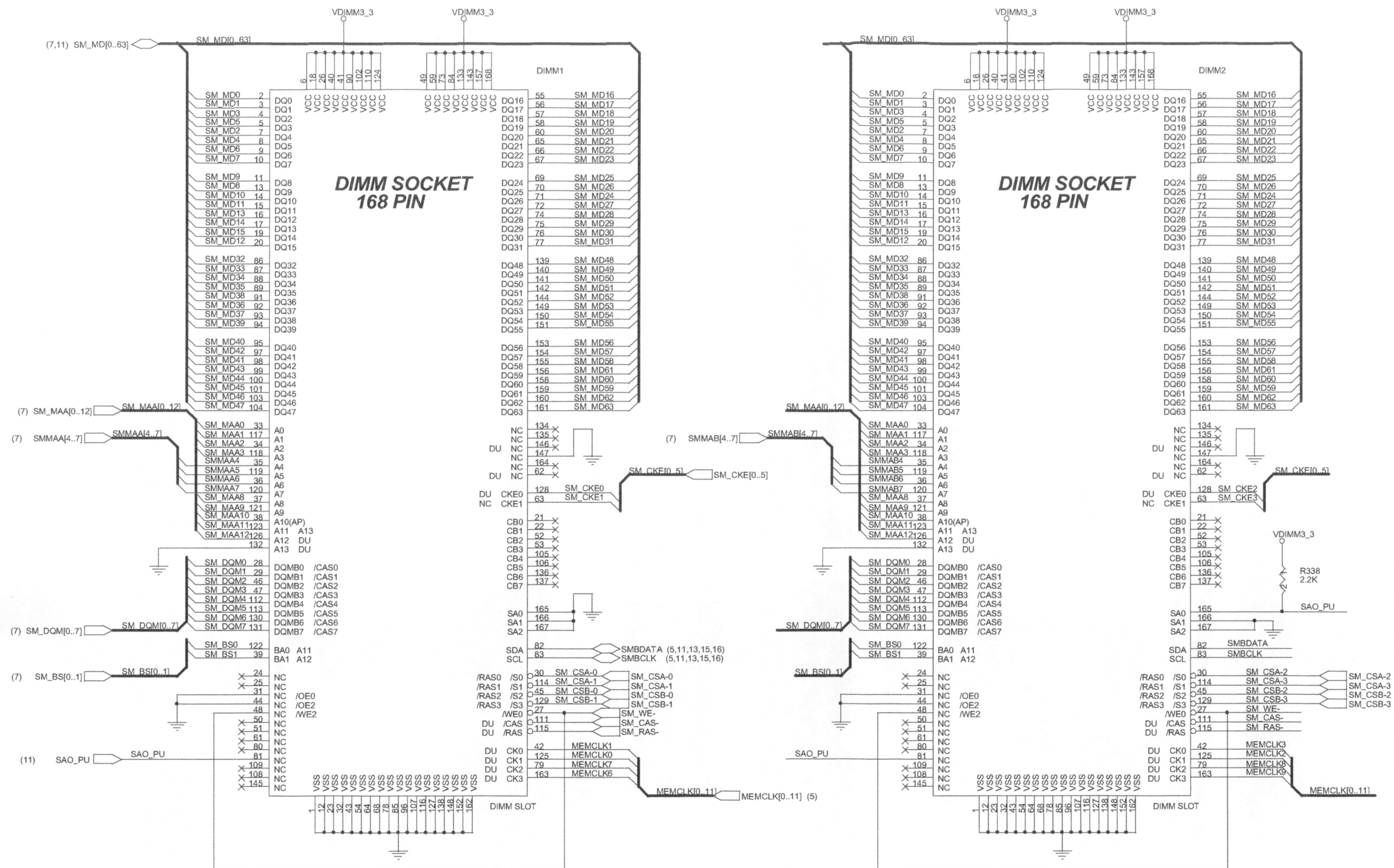
GMCH CORE PLANE DECOUPLING.
PLACE 1 0.1UF/0.01UF PAIR IN EACH CORNER, AND 2 ON OPPOSITE SIDES CLOSE TO COMPONENT IF THEY FIT.

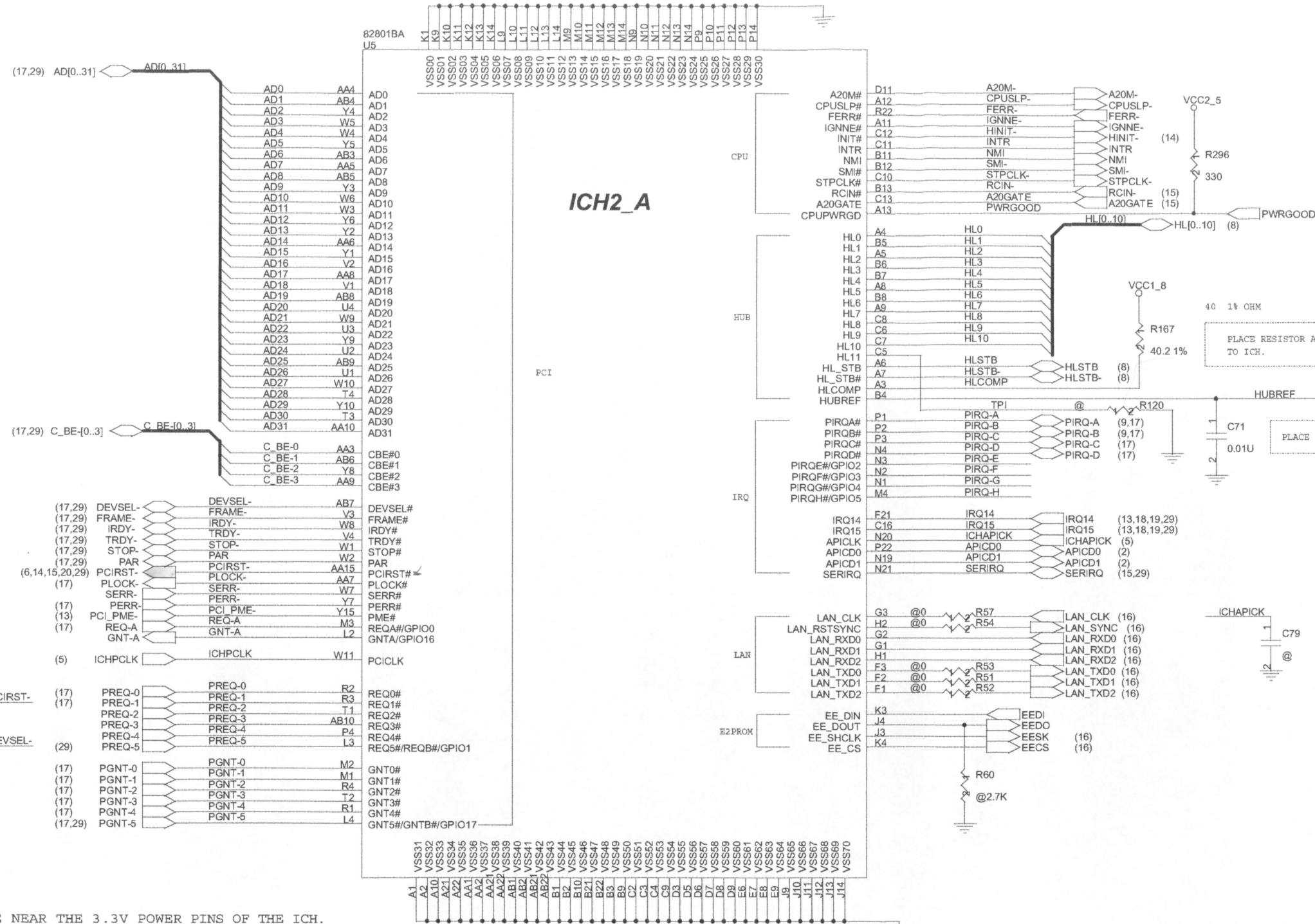
NOTE : MODEL 1 : USED GMCH(82812) CHIPSET
MODEL 2 : USED GMCH0(82810) CHIPSET



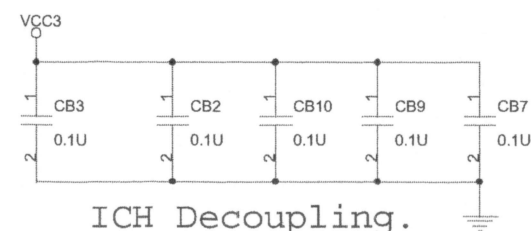




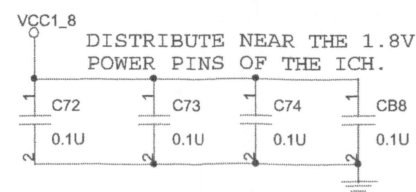
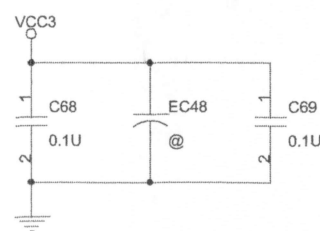




DISTRIBUTE NEAR THE 3.3V POWER PINS OF THE ICH.



ICH Decoupling.



DISTRIBUTE NEAR THE 1.8V POWER PINS OF THE ICH.

NOTE : MODEL1 : If should be used ICH then with 0 OHM of PERR- pin .

EPoX COMPUTER INC.

Title
ICH_A

Size B Document Number M815ADSN11

Rev 1.1

Date: Wednesday, November 21, 2001 Sheet 12 of 30

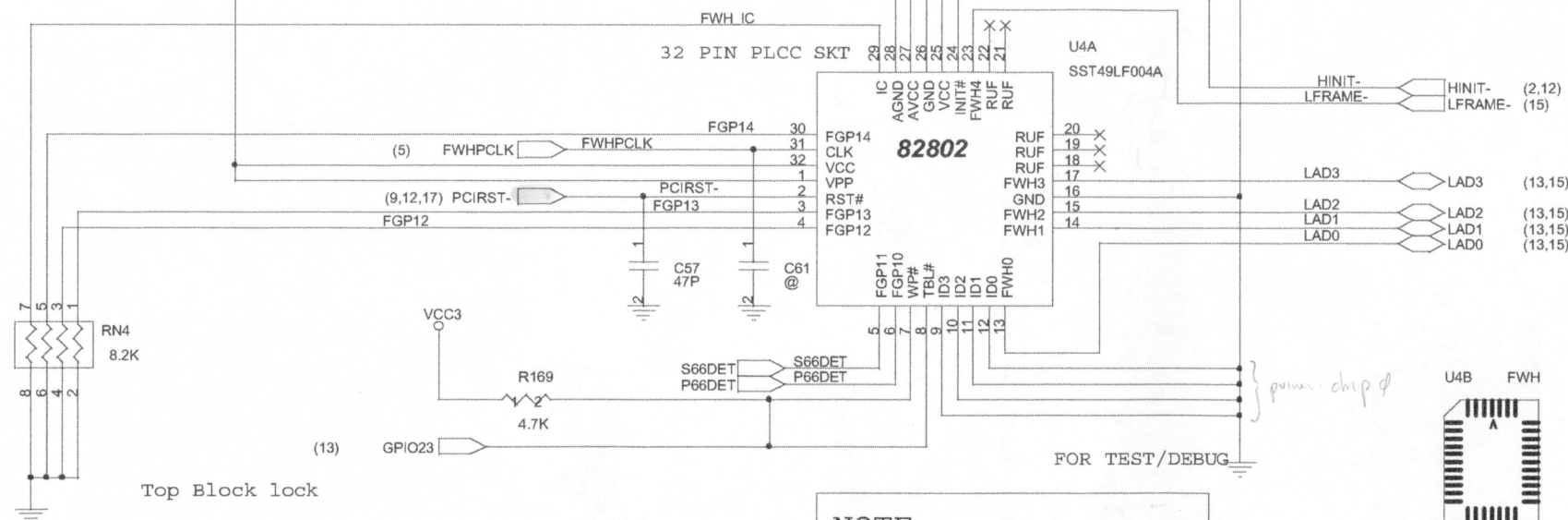
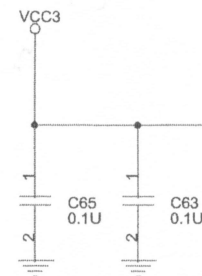
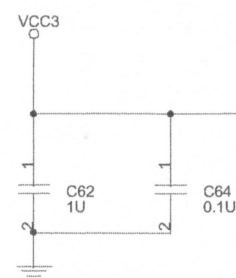
VCC5 1 XC00055 VIA
1 XC00056 VIA

VDIMM3_3 1 XC00057 VIA
1 XC00058 VIA
1 XC00059 VIA
1 XC00060 VIA
1 XC00061 VIA
1 XC00062 VIA

VCC3 1 XC00047 VIA
1 XC00048 VIA
1 XC00049 VIA
1 XC00050 VIA
1 XC00063 VIA
1 XC00064 VIA

VCCVID 1 XC00046 VIA
1 XC00077 VIA
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1 XC00084 VIA

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1 XC00075 VIA
1 XC00076 VIA



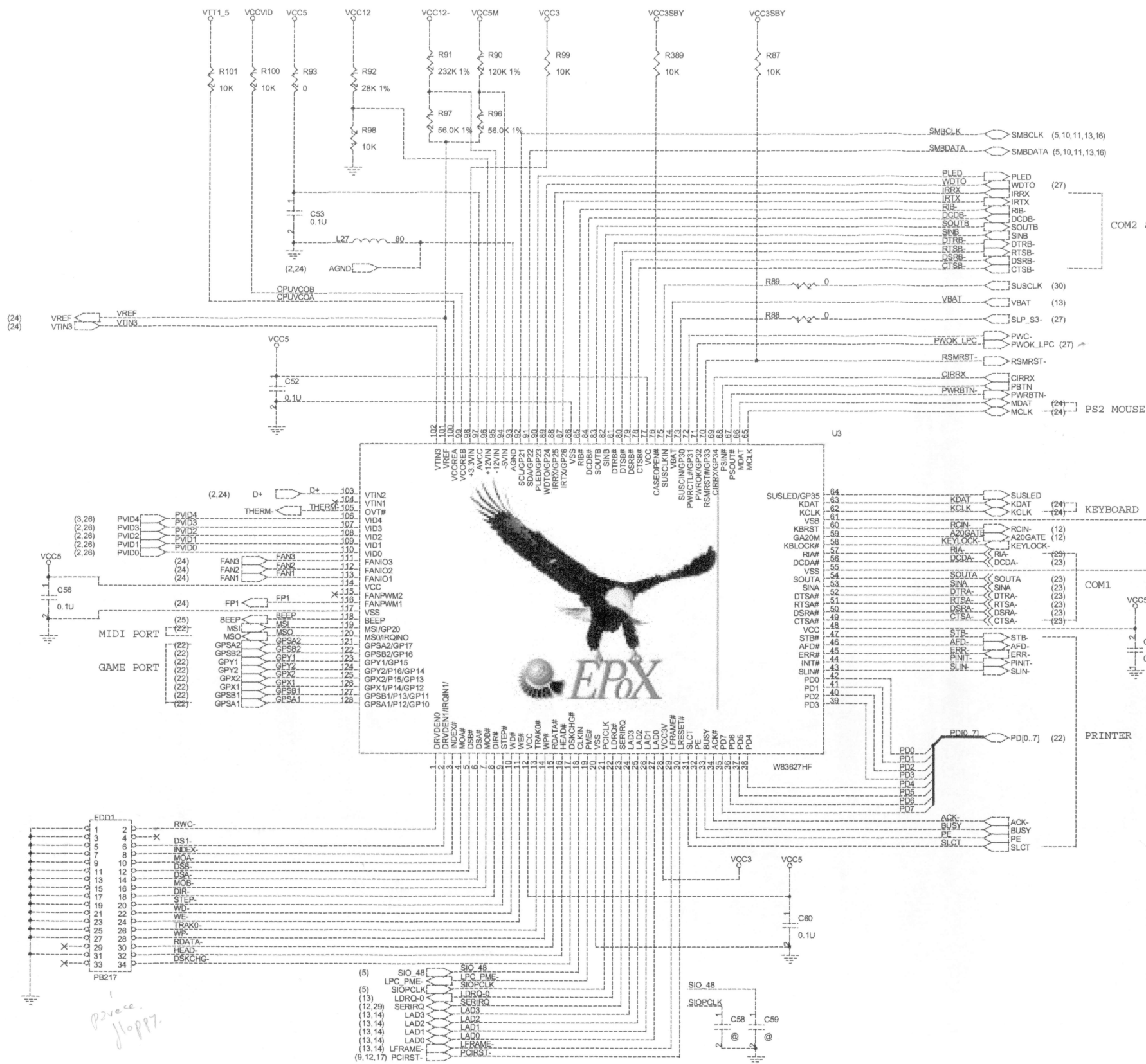
Top Block lock

NOTE :
VPP AND WP# ARE TIED TO 3.3V
IN THIS CONFIGURATION IS
REGISTER BASED WITH THE
EXCEPTION OF THE BOOT BLOCK.

XC00006 HOLE_4mm
XC00007 HOLE_4mm
XC00008 HOLE_4mm
XC00009 HOLE_4mm

XC00010 HOLE_4mm
XC00011 HOLE_4mm
XC00012 HOLE_4mm

XC00003	XC00000
1	1
FD MARK	FD MARK
XC00004	XC00001
1	1
FD MARK	FD MARK
XC00005	XC00002
1	1
FD MARK	FD MARK



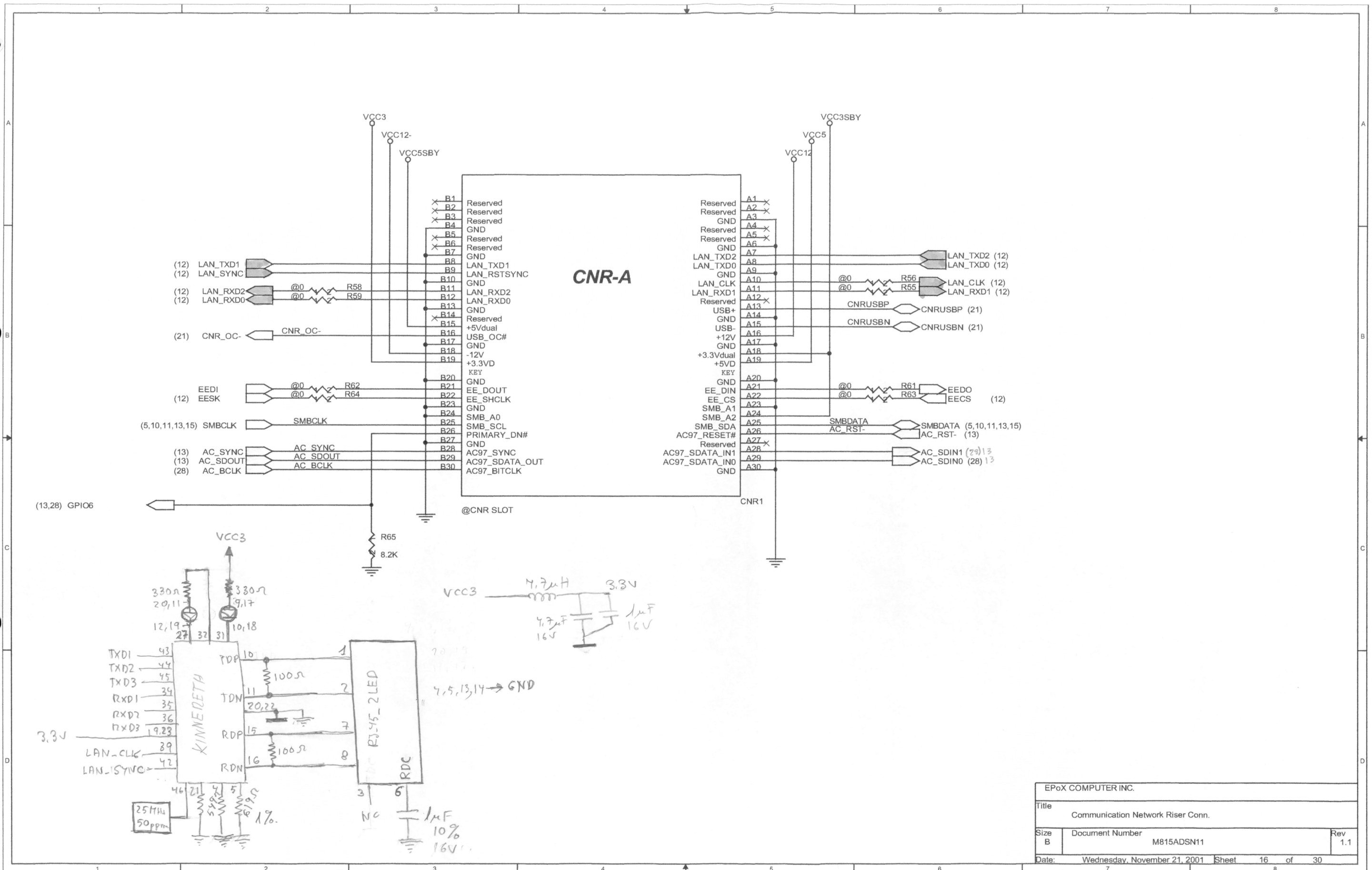
EPOX COMPUTER INC.

Title SIO_W83627HF

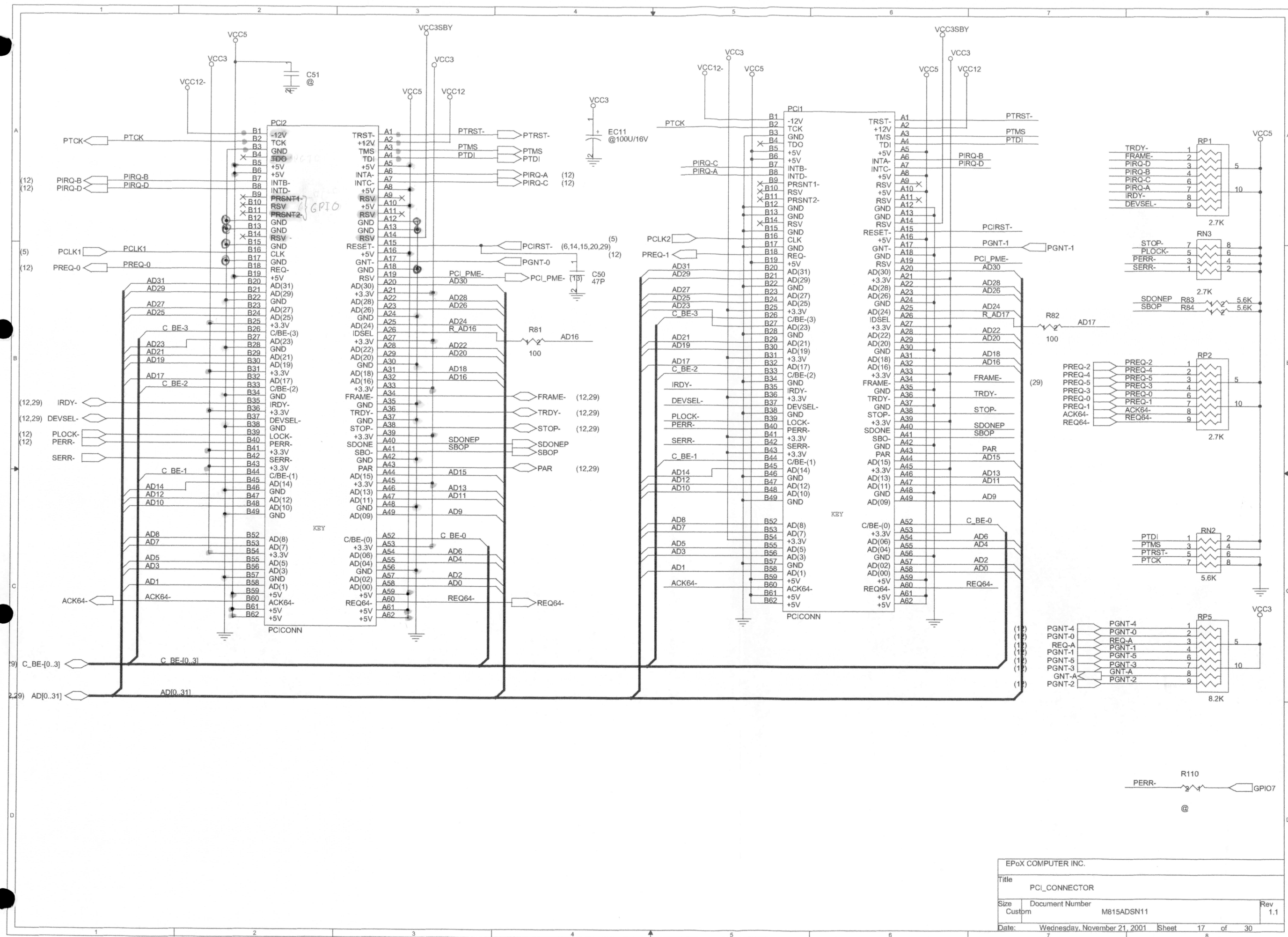
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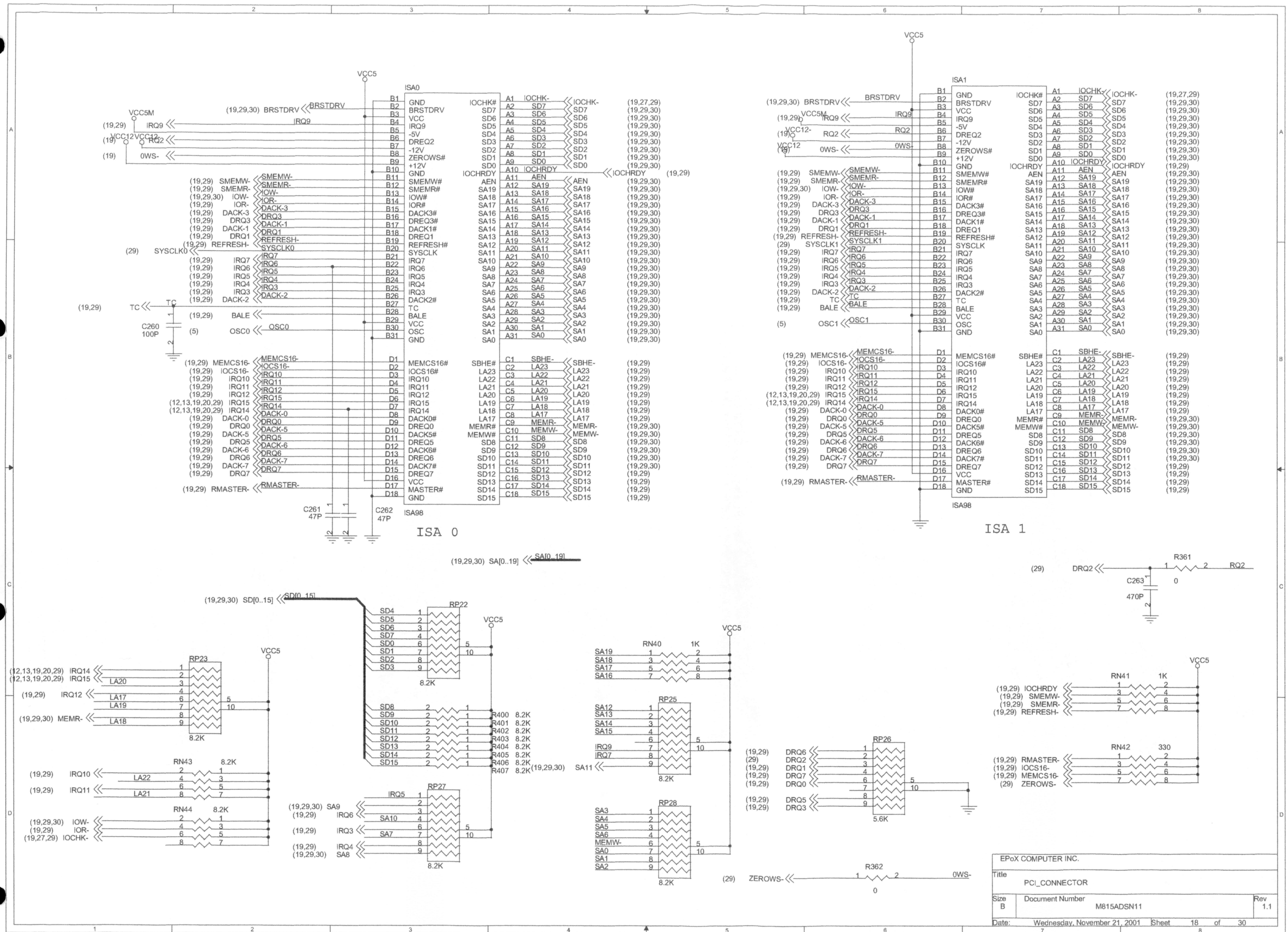
Rev 1.1

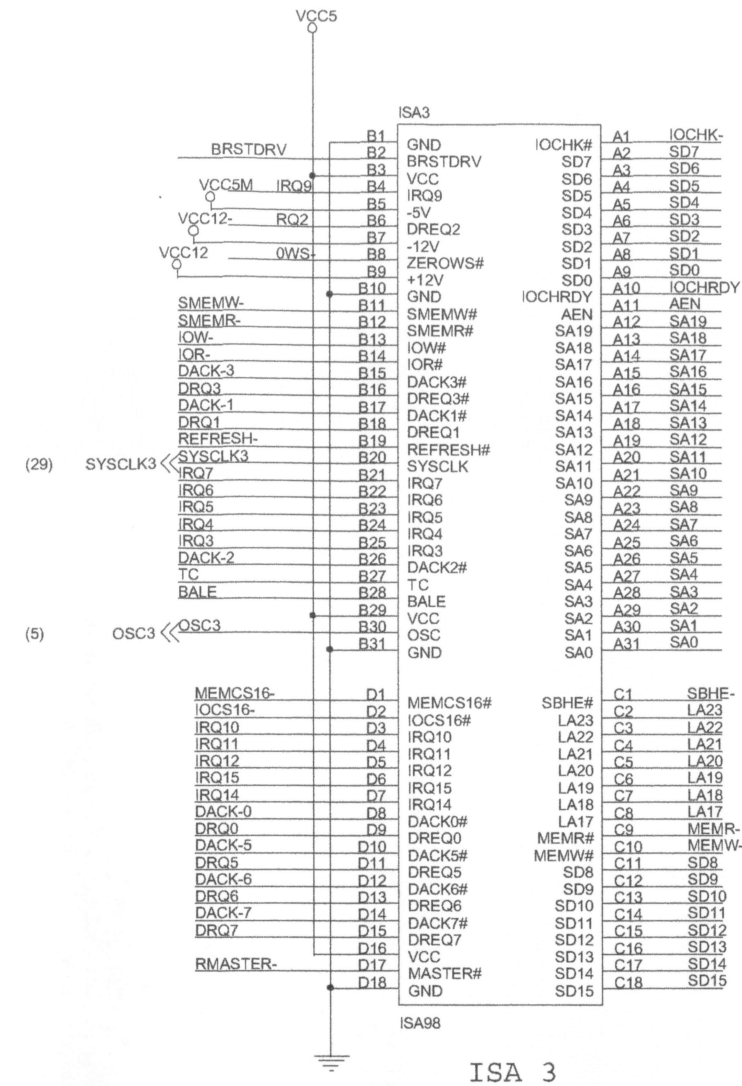
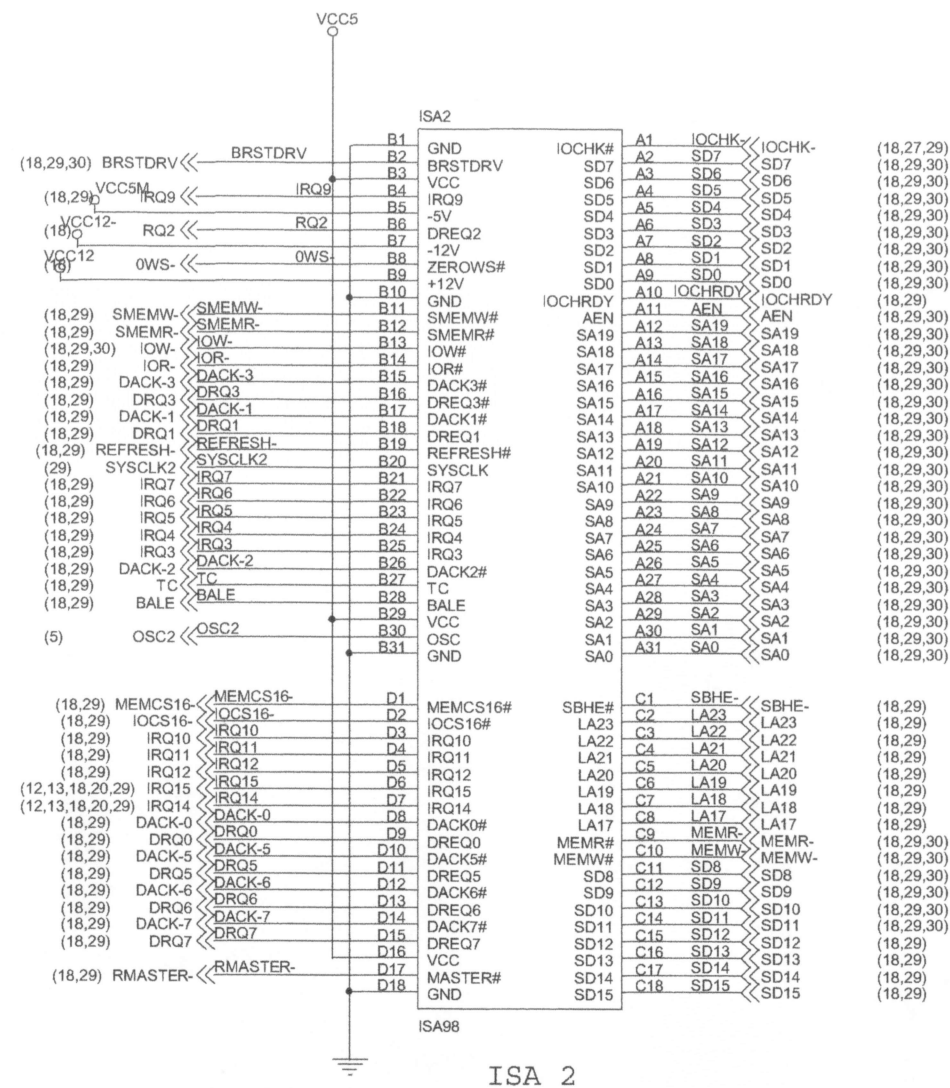
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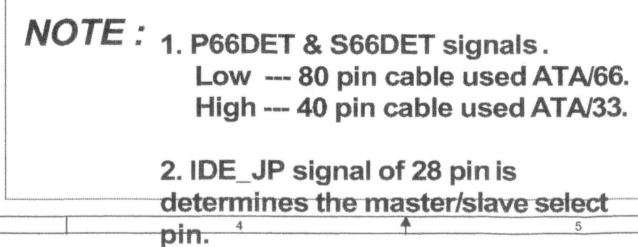


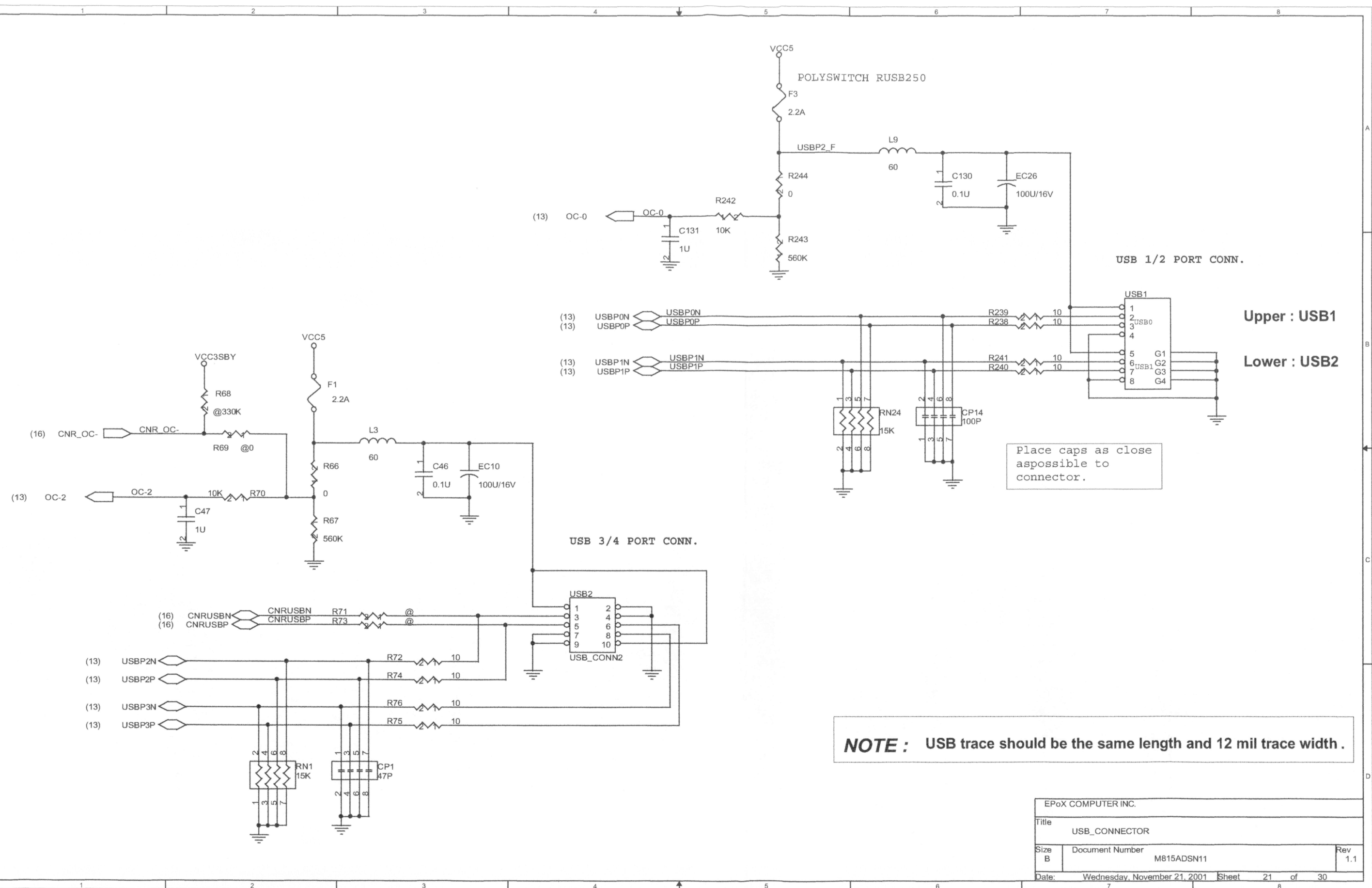
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Date:			
Wednesday, November 21, 2001			
Sheet			
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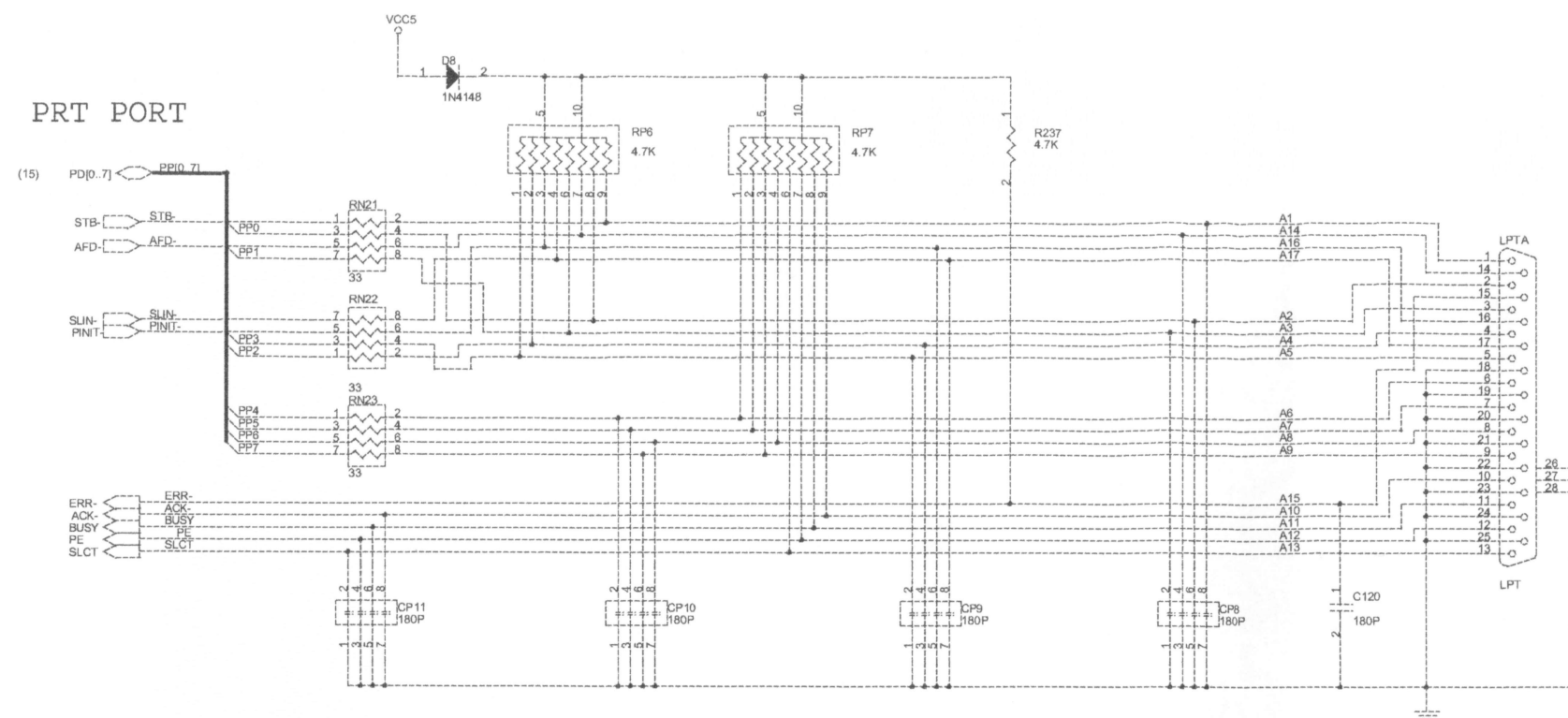




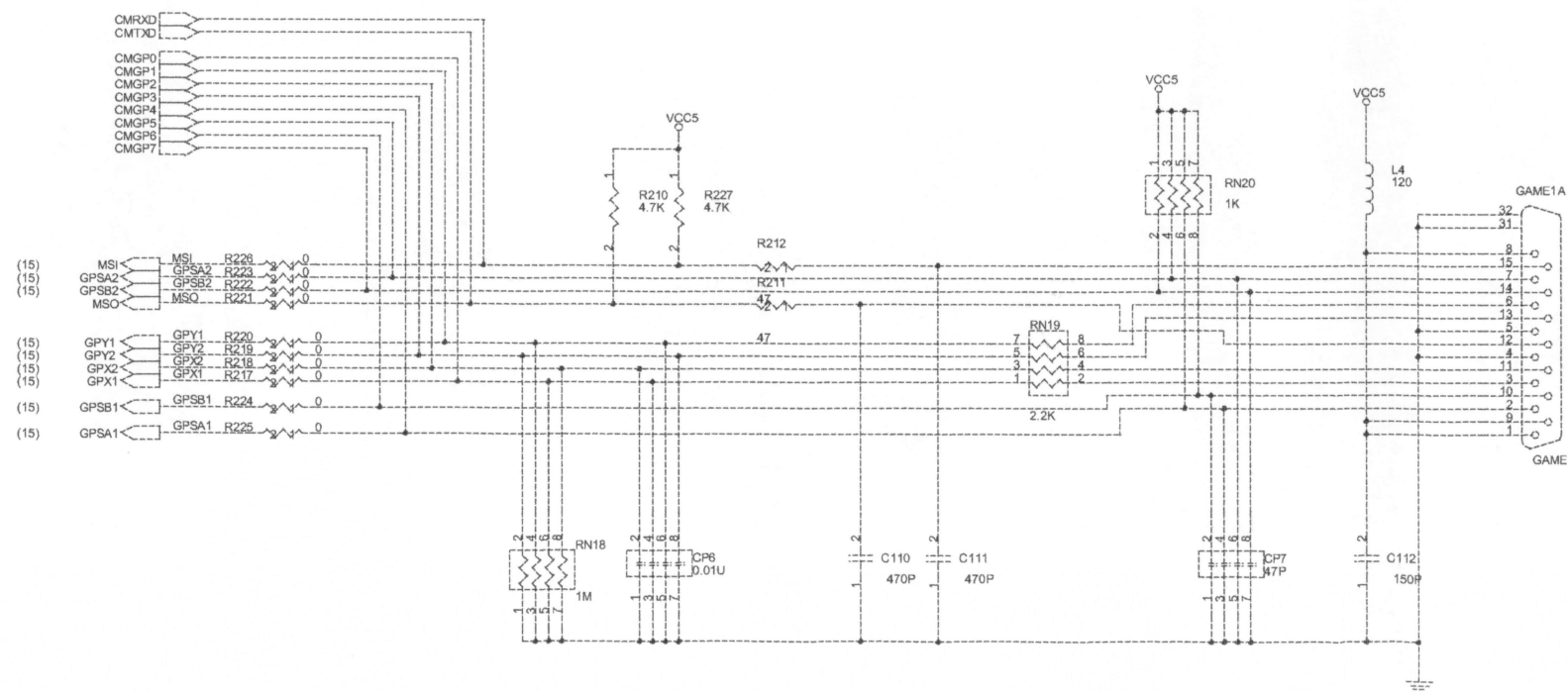


PRINTER PORT / GAME&MIDI PORT

PRT PORT



GAME & MIDI PORT



EPoX COMPUTER INC.

PARALLEL & GAME/MIDI PORT

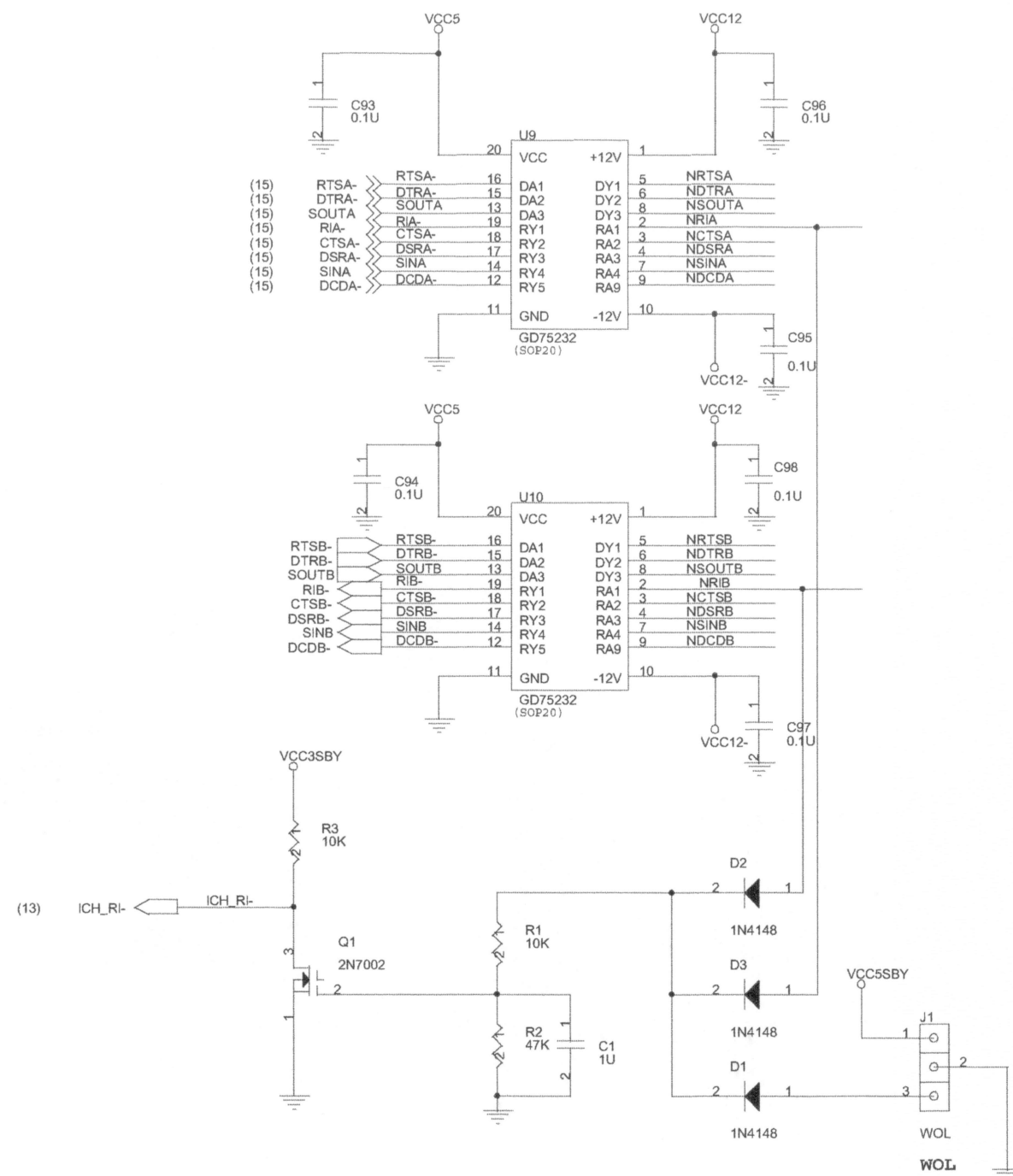
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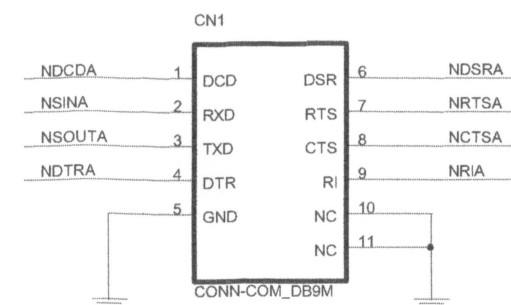
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SERIAL PROT

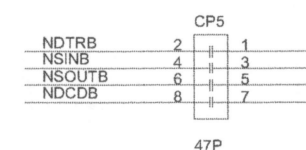
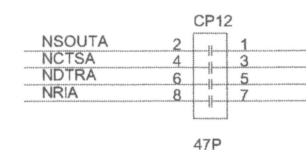
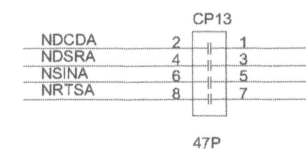
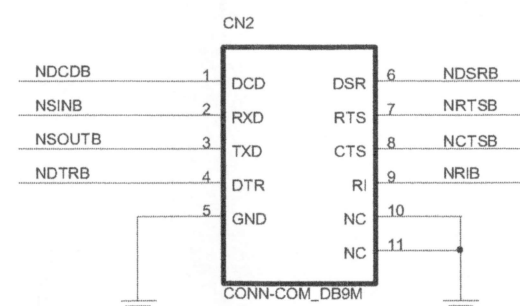
COM PORT



COM1



COM2



NOTE :

IF WAKE FROM S3 ON SERIAL MODEM IS NOT SUPPORTED DO NOT STUFF DIODE AND Q2.

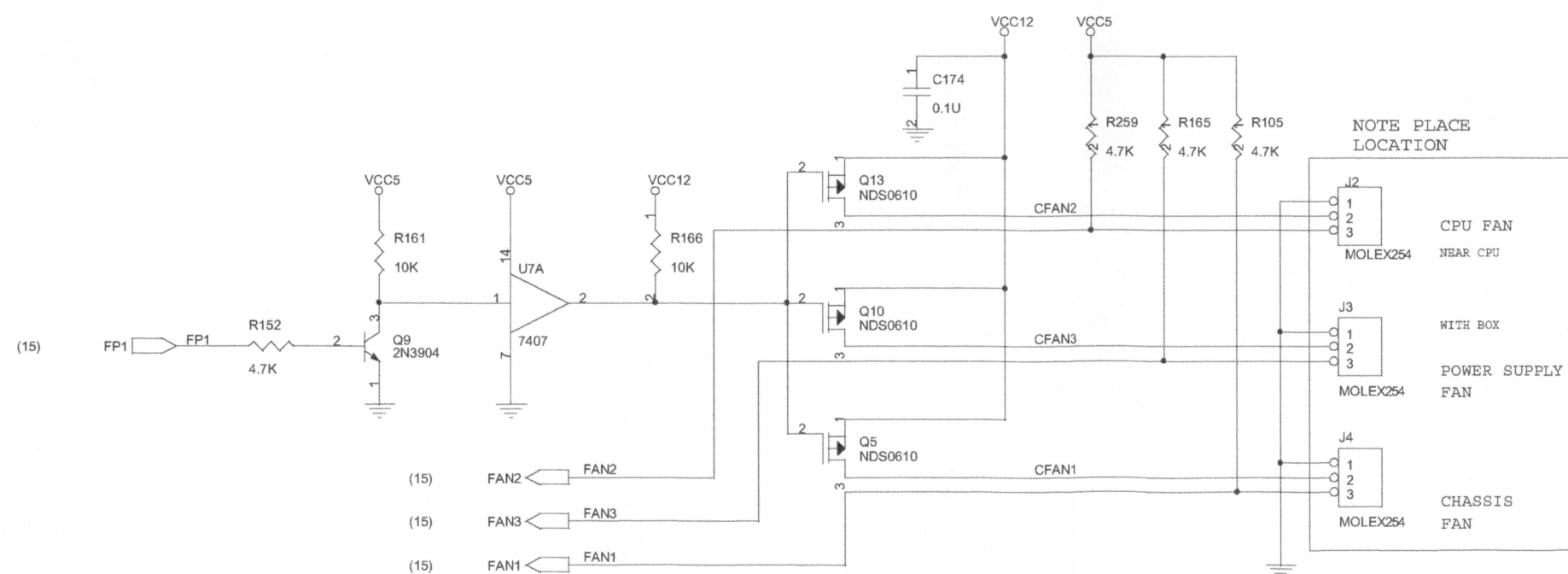
EPoX COMPUTER INC.

Title SERIAL & IR PORT

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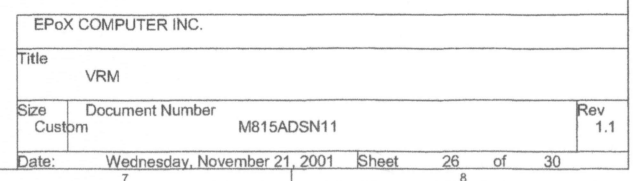


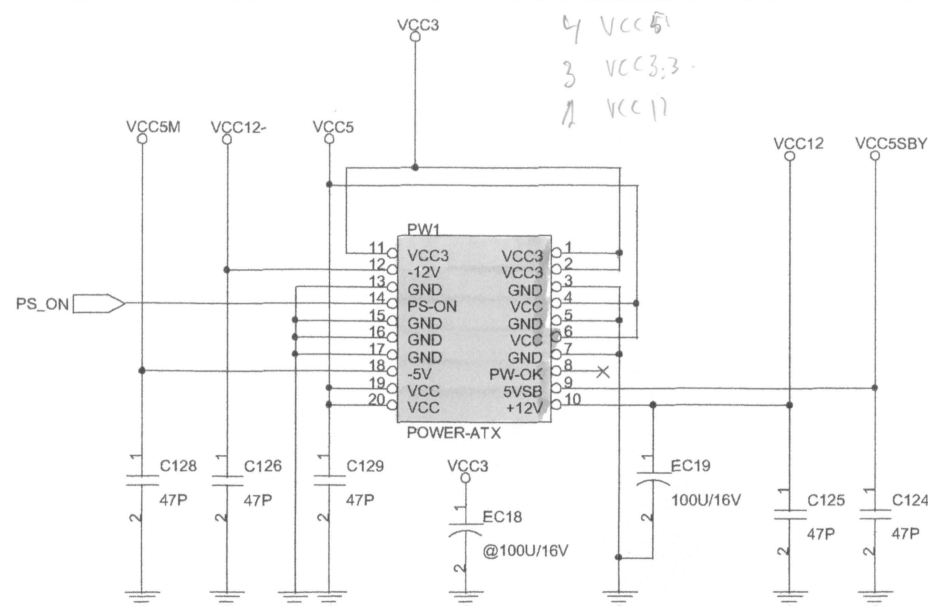
FAN SENSOR

+ 3.3 V.

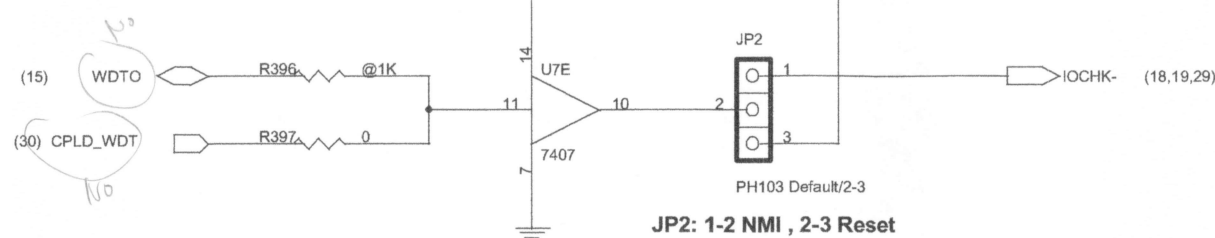
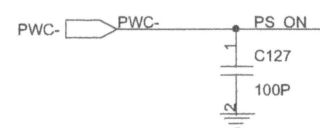
+ 5 V.

+ 12 V.

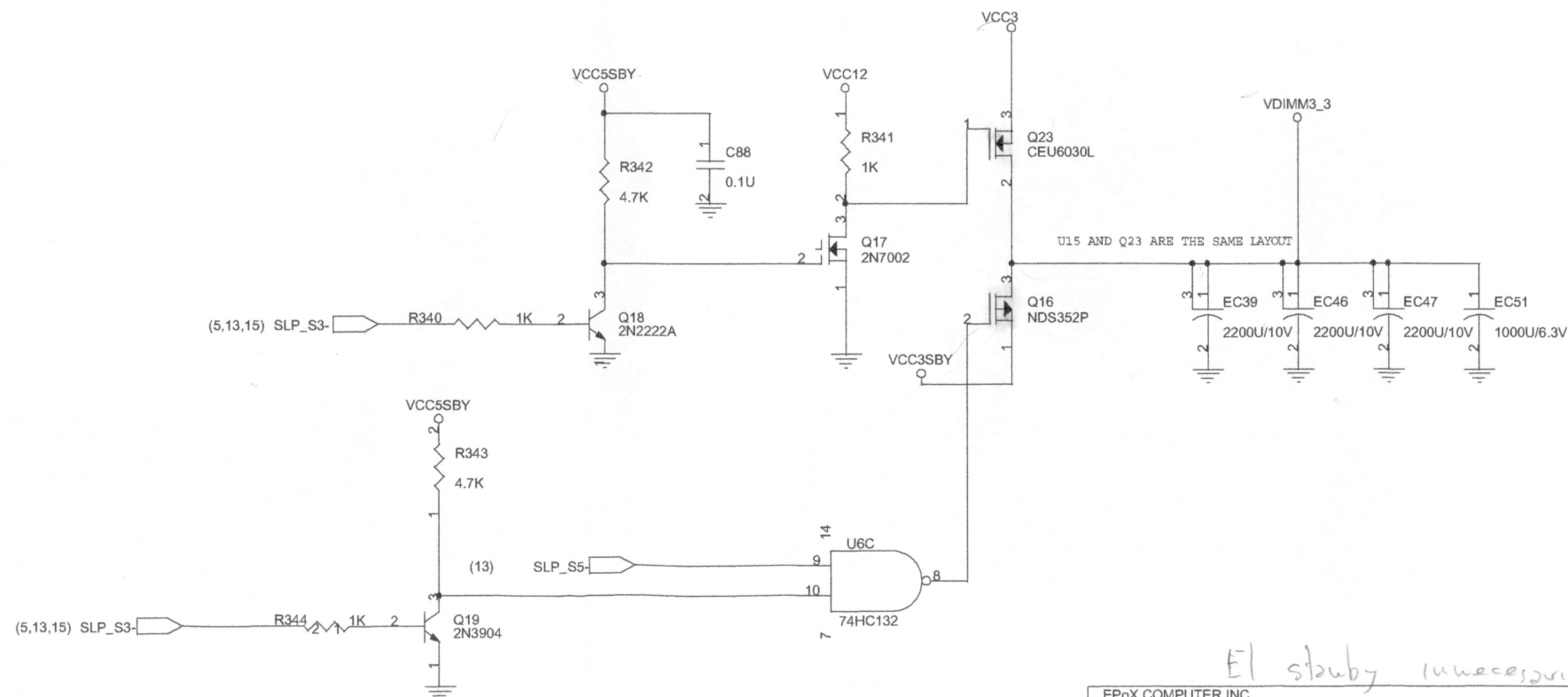
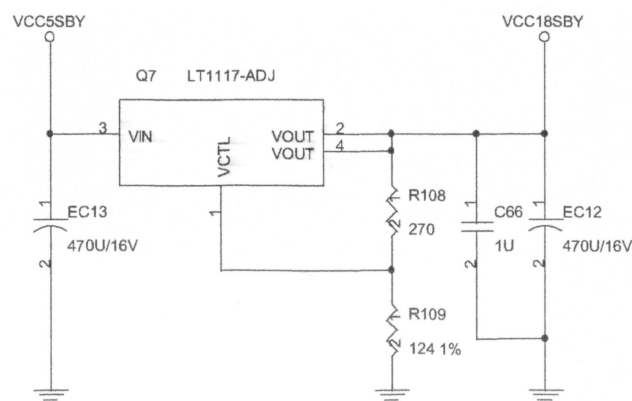
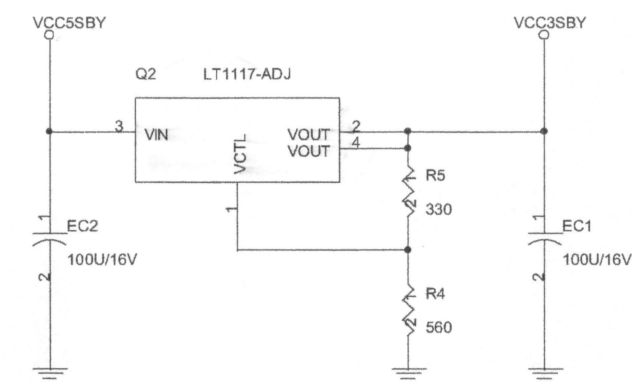


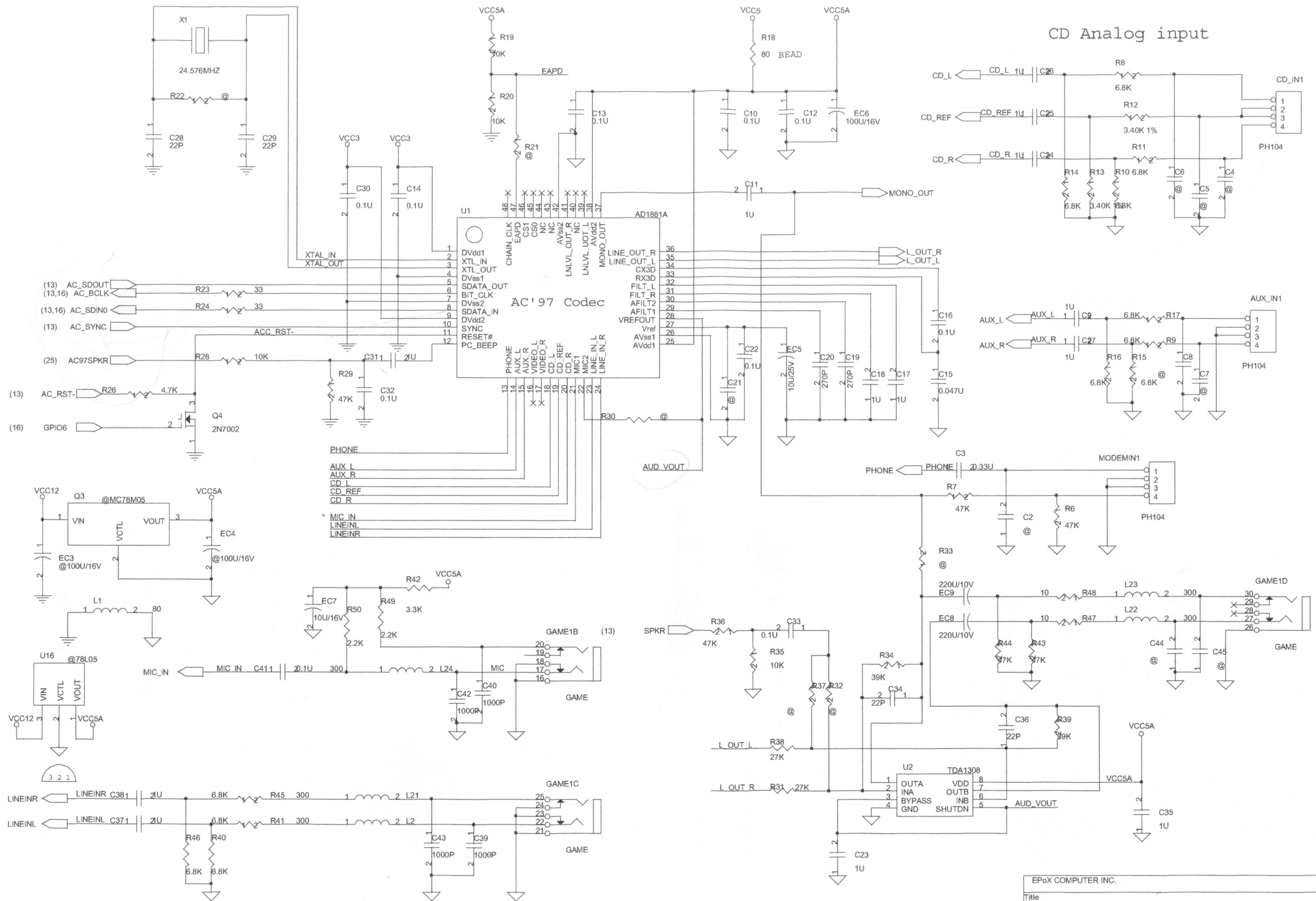


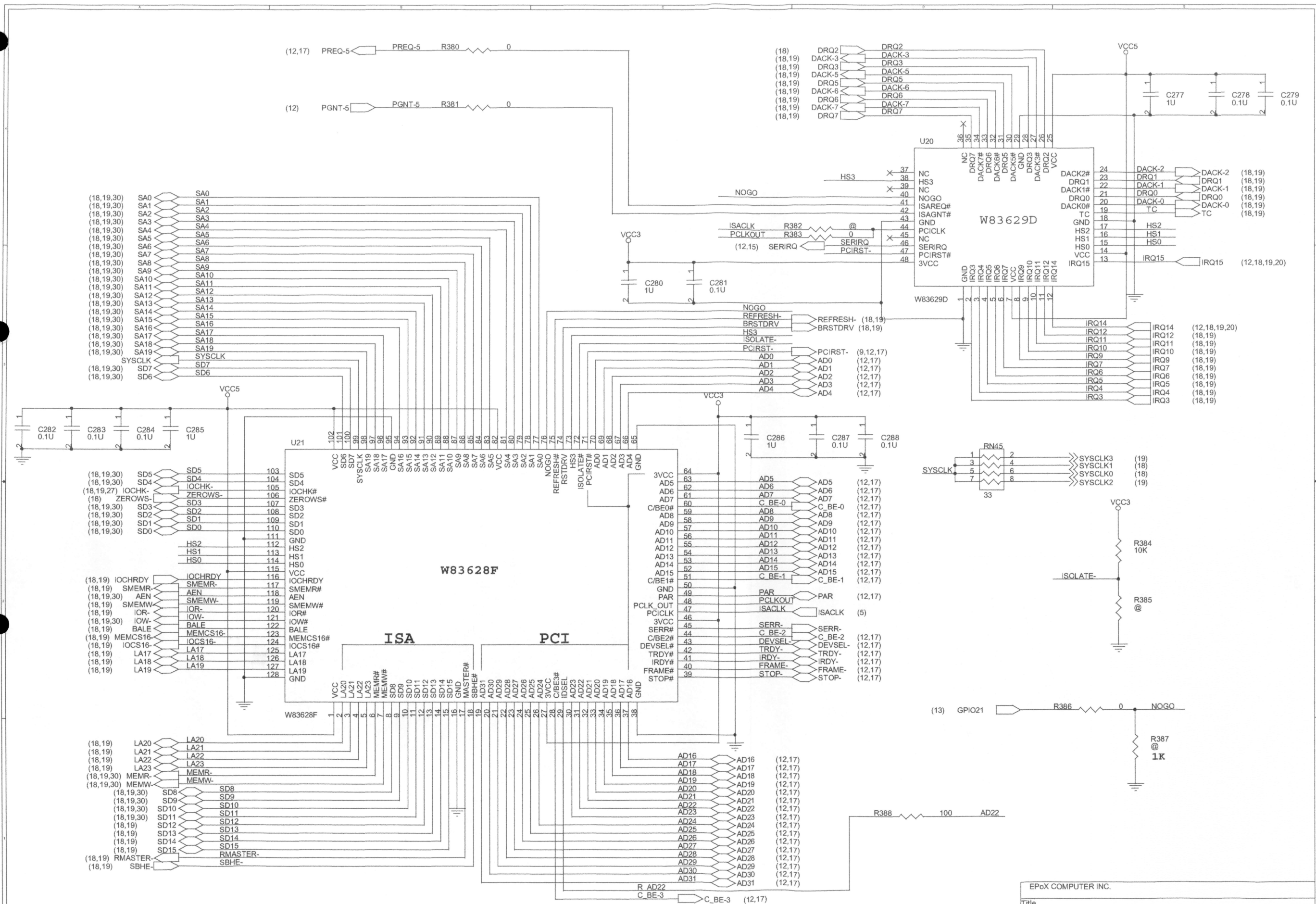
FIVE 47PF AND THREE 100UF CAPS AS CLOSE AS PW1 CONN.

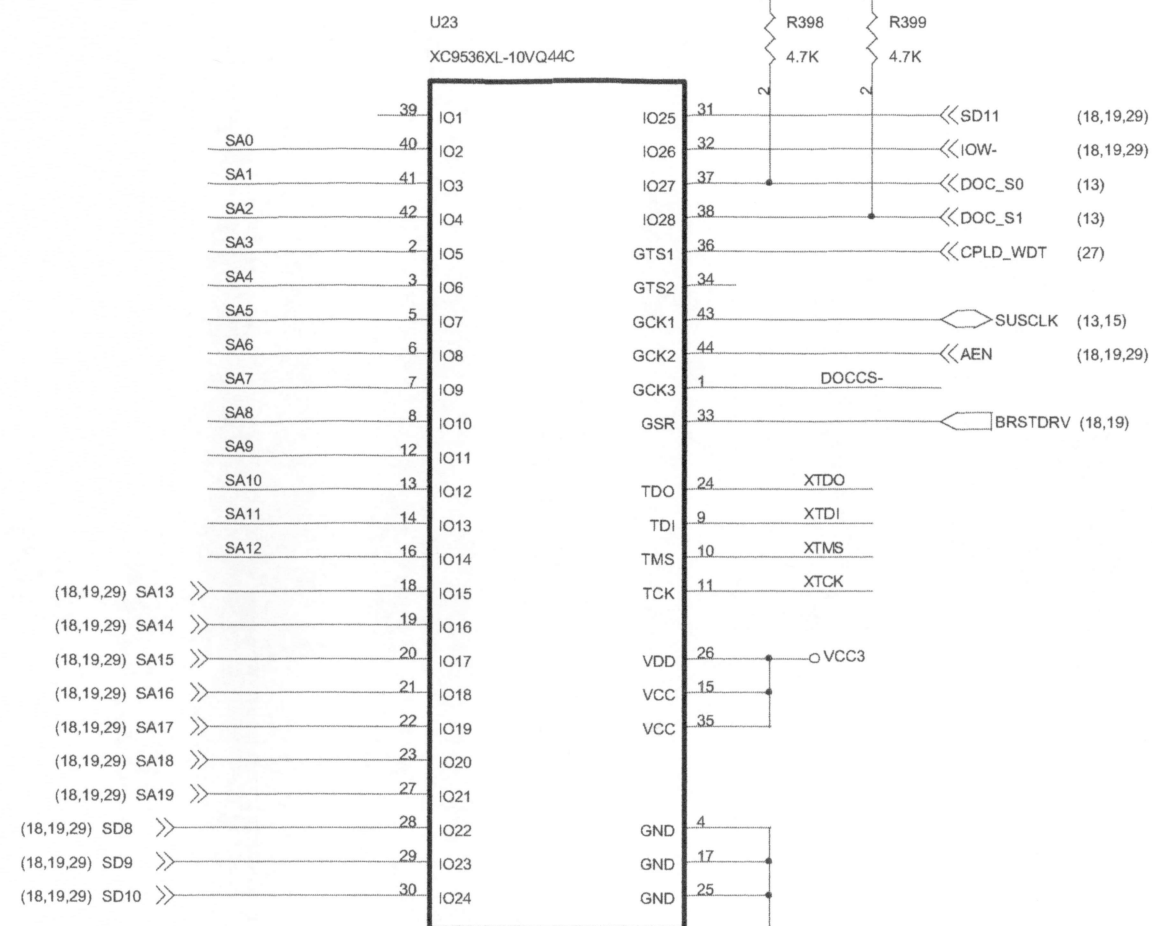
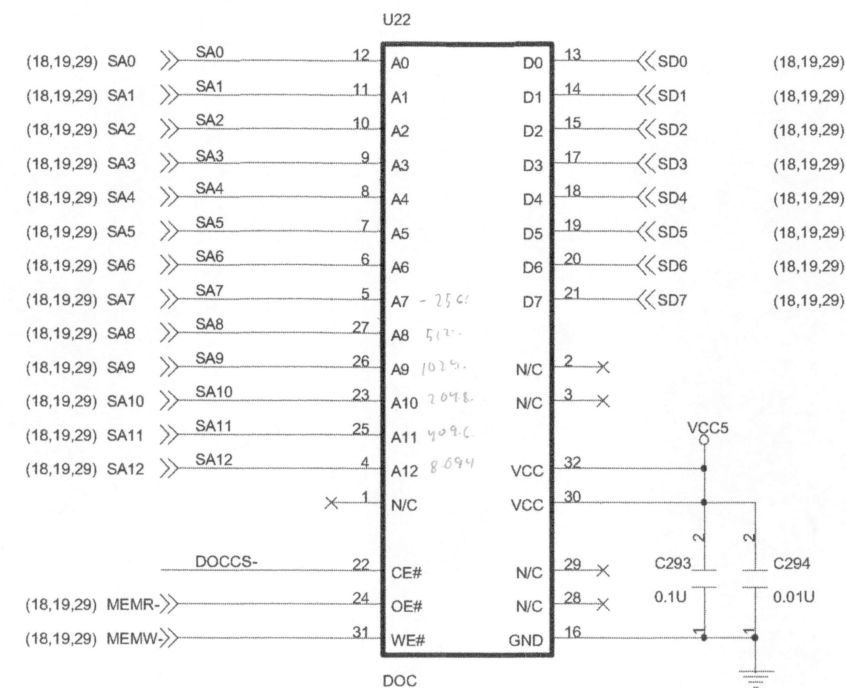


3.3V STANDBY / DUAL OUTPUT NOLTAGE
 STANBY : VCC3_3 PROVIDE VCC3_3SBY WITH VOLTAGE
 I max : 400mA
 P max : 1.5W
 NORMAL : VCC5SBY PROVIDE VCC3_3SBY WITH VOLTAGE
 I max : 12A
 P max : 43.5W



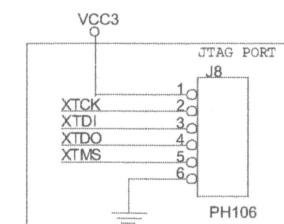






DOC DECODER

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Title WDOG & DOC

Size Document Number M815ADSN11

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